EXHIBIT "EHG-RW-3"

DDL Affidavit

Bell Atlantic - Legal Department
1095 Avenue of the Americas
New York, NY 10036
37th Floor
Tel 212 395-6509
Fax 212 768-7569

Joseph A. Post
Regulatory Counsel

September 13, 1999

Honorable Debra Renner
Acting Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223

Re: Case No. 98-C-1357

Dear Secretary Renner:

Pursuant to the Commission's September 9, 1999 "Notice Inviting Comments on Non-Recurring Charges For DSL Links", attached please find an original plus fifteen copies of Bell Atlantic – New York's "Joint Affidavit in Support of Proposed Rates for ADSL-Qualified, HDSL-Qualified, and Digital-Designed Links".

With one exception, the affidavit is being sent today by e-mail and by overnight delivery service to all active parties. The single exception is a party who has not provided an e-mail address, and who is therefore being served today by fax and by overnight mail.

Respectfully submitted,

Joseph A Post

cc: Mr. Timothy Zakriski
Kathleen Burgess, Esq.
Mr. Arthur Evans (by fax and overnight delivery service)
All Other Active Parties (e-mail and overnight delivery service)

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements	**Case 98-C-1357**

BELL ATLANTIC – NEW YORK'S JOINT AFFIDAVIT IN SUPPORT OF PROPOSED RATES FOR ADSL-QUALIFIED, HDSL-QUALIFIED, AND DIGITAL-DESIGNED LINKS

STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

STATE OF NEW YORK)
) ss.:
COUNTY OF WESTCHESTER)

CARMELO R. CURBELO, AMY STERN, and JAMES F. SCHAFER, being duly sworn, depose and say:

1. On August 30, 1999, New York Telephone Company, d/b/a Bell Atlantic – New York ("BA-NY"), filed amendments to its Tariff P.S.C. No. 916, introducing rates and regulations for ADSL-Qualified Links, HDSL-Qualified Links, and Digital-Designed Links. We respectfully submit this affidavit pursuant to the Commission's September 9, 1999 "Notice Inviting Comments on Non-Recurring Charges for DSL Links", in order to justify the proposed charges included in the tariff and to "demonstrat[e] . . . the rationale for imposing" those charges.

2. This affidavit is submitted jointly by all three affiants. Each of us has read the affidavit and supports it in its entirety. However, each of us has also taken primary

responsibility for specific sections of the affidavit, and we each rely on the facts and analyses presented by the other affiants in their own areas of primary responsibility. Specifically, Mr. Curbelo has taken primary responsibility for the section of this affidavit dealing with service costs, and Ms. Stern and Mr. Schafer have taken primary responsibility for the background information concerning the August 30 tariff filing and the activities underlying the proposed "ancillary" charges.

THE AFFIANTS

A. Ralph Curbelo

3. I am an Executive Director within the Bell Atlantic Service Costs organization, reporting to Bell Atlantic's Finance Department. As such, I am responsible for the development and application of cost study methodologies for various products and services offered by the Bell Atlantic operating companies, including BA-NY.

4. I received a Certificate of Graduation in Electronic Technology from the College of Aeronautics in 1960, a Bachelor's Degree in Mathematics from Lehman College in 1973, a Master of Science Degree in Industrial Engineering from Columbia University in 1975, a Professional Engineering Degree in Industrial Engineering from Columbia University in 1977, and a Master of Business Administration from Long Island University in 1996.

5. I have been employed by BA-NY, or by its affiliates and predecessor corporations since 1966. The first six years of my employment were spent primarily in the field of terminal equipment engineering; the next twelve years in performing and supervising engineering economy, cost and economy studies and analyses for products and

services; and the last fifteen years in a variety of Finance and Operations-related positions. I assumed my current position in 1995.

6. I have testified on service costs issues in proceedings before the Commission. I developed, or supervised the development of, the cost studies for resold services and unbundled network elements that have been submitted by BA-NY in the Commission's ongoing proceedings on resale and unbundled network elements (Cases 95-C-0657, *et al.* and this case).

B. Amy Stern

7. My current position is Director – Telecom Industry Services for the Bell Atlantic service area. I am responsible for product development and product management for loop and switch port products and for collocation.

8. I received a Bachelor of Arts Degree in Political Science and Economics from Brooklyn College of the City University of New York in 1977, and a Master of Business Administration Degree from the Wharton School of the University of Pennsylvania in 1979. Upon graduation, I joined the Bell System and held a variety of positions related to services costs and state regulatory matters. In 1985, I was promoted to the position of Director of Federal Regulatory Matters for NYNEX. In 1991, I assumed the position of Director of Operations at the Carrier Service Center, where I was responsible for building collocation arrangements, and for the order processing, billing, maintenance, and testing of interexchange carrier services. I assumed my current position in July of 1994. In this position, I was involved in negotiating several of the carrier interconnection agreements between Bell Atlantic operating companies and Competitive Local Exchange Carriers ("CLECs").

C. James Schafer

9. My current position is Manager — Joint Use and Regulatory Support for BA-NY. I am responsible for managing joint use for 2.5 million poles with the major and municipal electric companies in New York. I also support BA-NY's regulatory efforts related to outside plant engineering. I have been employed by BA-NY or by its affiliates and predecessor corporations since 1967. For the first 15 years of my career I held craft positions as a Linemen and Splicing Technician. In 1981 I was promoted to a supervisory position. I was subsequently transferred to Outside Plant Engineering, where I designed service and capital improvement jobs. In 1985 I transferred to BA-NY's Training Department and taught technical Outside Plant courses. In 1988 I was promoted to Manager and taught courses related to Outside Plant Engineering Design and related OSS support systems. In 1995 I assumed my current position in Facility Management.

BACKGROUND OF THE AUGUST 30 FILING

10. The term "xDSL" describes a family of transmission technologies that use specialized electronics at the customer's premises and at a telephone company's central office (or other company facility)[1] to transmit high-speed data signals over copper cables.

11. The two xDSL technologies that are relevant to the August 30 tariff filing are Asymmetrical Digital Subscriber Line ("ADSL") and High Bit-Rate Digital Subscriber Line ("HDSL"). ADSL utilizes a twisted-pair copper loop. The technology is "asymmetrical" in the sense that it can support a signal of up to 640 Kbps from the customer to the telephone company, but a signal of much higher bandwidth — up to 6 Mbps

[1] In the case of ADSL, discussed below, the equipment at the customer premises is commonly referred to as an "ATU-R". The equipment at the telephone-company end of the circuit is commonly referred to as a Digital Subscriber Line Access Multiplexer ("DSLAM").

— from the telephone company to the customer.[2] The higher bandwidth in the telephone-company-to-customer direction permits rapid downloading of information from Internet Web servers or other databases. Moreover, using ADSL technology, data signals can be combined with a conventional voice-grade POTS signal and transmitted over a single facility.

12. BA-NY currently uses ADSL technology to provision a retail voice-and-data service known as Infospeed DSL. Various CLECs offer their own, competitive retail services based on ADSL technology.

13. HDSL comes in two varieties, one of which utilizes a two-wire copper loop and the other of which utilizes a four-wire copper loop. The two-wire version supports symmetrical transmission at speeds of up to 784 Kbps; the four-wire version supports speeds of up to 1.5 Mbps. HDSL technology can be used to provision DS-1 circuits.

14. The principal purpose of the August 30 tariff filing was to offer unbundled loops qualified for ADSL and HDSL transmission.[3] CLECs wish to use such loops to provision their own voice and data transport services. More specifically, the tariff offers the following new services:

- Digital two-wire link (ADSL Qualified)
- Digital two-wire link (HDSL Qualified)
- Digital four-wire link (HDSL Qualified).

---

[2] The precise speed that is available in each direction depends upon the specifications of the terminating electronics that are used.

[3] The terms "link" and "loop" are used interchangeably in this affidavit.

These links are simply two- or four-wire copper loops that will support the transmission of ADSL or HDSL signals. They extend from the customer's premises to an interconnection point between BA-NY and the CLEC, located at a collocation arrangement in BA-NY's central office. BA-NY does not provide the xDSL terminating electronics at either end of the transmission path. Those are provided by the CLEC, its customer, or a third party.

15. As will be described in greater detail below, certain technical difficulties arise when ADSL or HDSL signals are transmitted over loops that exceed a certain length. Thus, the August 30 tariffed offering of ADSL-qualified links is limited to links of less than 18,000 feet. The offering of HDSL-qualified links is limited to links of less than 12,000 feet. (These lengths include any bridged taps that are present.[4]) If a CLEC desires ADSL- or HDSL-level transmission over loops exceeding these lengths, loop "conditioning" may be required. Loops which require special conditioning for ADSL or HDSL transmission, either because of their length or for other reasons, are provided for through a separate offering, referred to as "Digital-Designed Links" ("DDL"). Rates and regulations applicable to DDL are also included in the August 30 filing.

16. The basic recurring charges for these ADSL- and HDSL-qualified links are based on existing, Commission-approved recurring loop rates for two- and four-wire analog loops. As the Commission indicated in its September 9 Notice, those recurring charges are not at issue here, but will be considered in connection with BA-NY's revised

[4] Bridged taps are a branching of a copper loop that permits the "appearance" of the loop at a number of alternative serving terminal locations. Bridged taps give a telephone company greater flexibility in re-assigning a telephone number to a different address without re-arranging existing facilities. An addition to adding length to a loop (and thus impairing its transmission characteristics), bridged taps create interference through reflection of signals from the point where the loop branches.

UNE cost filing, currently scheduled for December 3, 1999.[5] Those rates will therefore not be discussed further in this affidavit.

17. The August 30 tariff filing also provided for a variety of "ancillary" charges related to ADSL-qualified links, HDSL-qualified links, and DDLs. These charges are listed below.[6] All of the charges are non-recurring charges ("NRCs"), with the exception of the Mechanized Loop Qualification Charge, which is a monthly recurring charge.

ANCILLARY CHARGES FOR ADSL/HDSL-QUALIFIED LINKS AND DDLs
Mechanized Loop Qualification
Manual Loop Qualification
Engineering Query
Engineering Work Order
Pair Swap
Addition to ISDN Loop Extension Electronics
Removal of Bridged Taps
Removal of Load Coil

18. The costs set forth in this affidavit reflect additional review of the cost studies submitted together with the August 30 filing. That review resulted in reductions in the Company's estimates of certain costs (and, therefore, in the corresponding proposed rates). A complete, revised set of workpapers, along with a summary list of the revised proposed rates, is attached as Exhibit A to this affidavit.

19. As noted above, BA-NY will be filing cost studies related to the basic recurring rate for ADSL- and HDSL-qualified loops in its December 3, 1999 filing in this case. In preparing that filing, BA-NY will be reviewing in detail a variety of issues re-

[5] The Notice refers to the proceedings related to the December 3 filing as the "third module" of Case 98-C-1357.

[6] Certain general loop-related charges, such as Service Order Charges, may also apply with respect to ADSL-qualified and HDSL-qualified loops. These charges have already been approved by the Commission in Case 95-C-0657.

lated to such loops and the manner in which they are provisioned. It is possible that conclusions reached by BA-NY as a result of that additional review will affect issues related to the level or application of the rates considered in this affidavit. Accordingly, BA-NY submits that rates set on the basis of this affidavit should be regarded as interim, and subject to prospective adjustment based on the Commission's review of the December 3 filing.

DESCRIPTION OF ANCILLARY SERVICES AND CHARGES

20. Most of the ancillary charges fall into two categories:

(a) charges related to loop qualification — *i.e.*, to determining whether a particular loop is qualified for ADSL or HDSL transmission (Mechanized Loop Qualification Charge, Manual Loop Qualification Charge, Engineering Query Charge); and

(b) charges related to conditioning of unqualified loops (Engineering Work Order Charge, Pair Swap Charge, Removal of Bridged Taps Charge, Removal of Load Coils Charge, and Addition to ISDN Loop Extension Electronics Charge).

In general, a CLEC would order services in the first category for all or most loops on which it wishes to offer ADSL- or HDSL-based services, in order to determine whether those loops are appropriately qualified. Services in the second category would only be ordered where the CLEC wishes to offer xDSL-based services over a loop that is not initially qualified, or if the terminating electronics chosen by the CLEC requires transmission paths with unique technical characteristics or specifications.

21. BA-NY, like CLECs, incurs qualification costs in connection with its offering of retail, ADSL-based services such as Infospeed DSL. The extent to which CLECs will incur conditioning costs depends upon the terminating electronics that they choose to use and the extent to which they are willing to limit their retail offering to customers whose loops meet certain requirements. BA-NY has chosen for the present to

limit its own retail offering (Infospeed DSL) to loops of 15,000 feet or less that do not require any conditioning. Other carriers may choose to impose less stringent conditions on their retail offerings, but if they do, they, and not BA-NY, should bear the costs caused by that marketing decision. Similarly, if CLECs choose to design services requiring more detailed qualification information than is necessary to offer BA-NY's retail services, they should bear the costs associated with that decision as well.

A. Mechanized Loop Qualification Charge

22. The primary means by which CLECs can obtain loop qualification information is by submitting queries to BA-NY's loop qualification database (the "Database"). This Database supports both BA-NY's retail Infospeed DSL service and the provision of unbundled xDSL-compatible links to CLECs.

23. The creation of the Database for a particular central office involves MLT testing of a sample of the loops in each terminal served by that office, as well as a determination of whether the loop is served by copper or by fiber (*i.e.*, Digital Loop Carrier ["DLC"] technology).

24. Under current procedures, a CLEC can submit a query to the Database through BA-NY's standard Operations Support System wholesale interfaces, including both EDI and the Web GUI. The query may identify the loop in question by telephone number or address. The response from the Database will indicate: (a) total metallic loop length (including bridged taps), and (b) qualification of the loop per BA-NY standards (yes/no).

25. In the future, information in the Database will be periodically updated to ensure that the Database is as complete, accurate, and current as possible. Entries must

be updated, for example, to reflect the addition of new cables and changes in parameters of existing loops. Additionally, BA-NY will consider requests for programming changes that would extend the range of information provided by the Database. These activities are referred to in this affidavit as Database "maintenance". "Maintenance", as the term is used here, does not include any maintenance activities related to the hardware on which the Database is stored.

26. The Mechanized Loop Qualification Charge is imposed to recover the costs associated with the creation and maintenance of the Database.[7]

27. The costs associated with creating and updating the Database are appropriately recovered on a per-loop basis for all loops that are utilized to provide ADSL-based services. Moreover, BA-NY is proposing to recover those costs through a monthly recurring charge. We believe that a recurring charge would be preferred by most CLECs; however, we would be willing to recover the relevant costs through a non-recurring, loop-based charge if the Commission prefers that option.[8]

28. BA-NY does not propose to impose the Mechanized Loop Qualification Charge on loops served by central offices that are not included in the Database at the time of the CLEC request.

B. Manual Loop Qualification Charge

29. Where a loop is not included in the Database (or, if a CLEC desires certain information beyond that included in the Database), loop qualification will have to be de-

[7] The charge is not based on the actual (*i.e.*, historical) costs of creating and maintaining the Database, but rather on the estimated, forward-looking costs of the functions involved in Database creation (and maintenance).

[8] As the Commission's September 9 Notice recognizes, the Mechanized Loop Qualification charge is the only *recurring* ancillary charge included in the tariff. The other proposed charges that are considered in this affidavit are all NRCs.

termined manually, *i.e.*, by running additional MLT tests and by having BA-NY's engineering personnel consult the LFACS database. The Manual Loop Qualification Charge recovers the costs associated with this process. Information available through Manual Loop Qualification includes (a) total metallic loop length (including length of bridged taps), (b) presence of load coils (yes/no), (c) presence of Digital Loop Carrier equipment (yes/no), and (d) qualification per BA-NY's standards.

30. The functions required for Manual Loop Qualification are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Central Office Technician	Technician performs MLT test on all request for Manual Loop Qualification and checks LFACS database. These steps will provide all the information needed to respond to the Manual Loop Qualification request in 80% of the cases. In 20% of the cases further investigation will be required.
Engineering Clerk	For the 80% of the requests tested by MLT, half of the results will require an Engineering Clerk to review paper records and, after review and approval by an Engineer, update LFACS to ensure that the request for an ADSL-qualified loop can be processed on a mechanized basis. For the 20% of the requests that require further investigation, the Engineering Clerk will review paper records to determine the information necessary to respond to the request and forward the information to an Engineer for review and approval.
Engineer	For the 80% of the requests tested by MLT, an Engineer will review and approve the loop make-up sheets as prepared by an Engineering Clerk for input into LFACS. For the 20% of the requests that were investigated manually by an Engineering Clerk, an Engineer will review and approve the loop make-up sheets and send a mechanized response back to the appropriate operations center.

C. Engineering Query Charge

31. In some cases, in order to design and implement its retail services, a CLEC may desire additional information even beyond that provided by Manual Loop

Qualification. Such information might include the number and location of bridged taps, the number and location of load coils, the location of Digital Loop Carrier equipment, or the cable gauge at specific locations. To the extent that such information is available from BA-NY's plant records ("plats"), the Company will search for it and provide it to CLECs upon request. The Engineering Query Charge recovers the costs associated with processing and responding to such requests.

32. The functions required for Engineering Query are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Central Office Technician	Technician performs MLT test.
Engineering	Researches plant records and LFACS database to determine location of splice points, bridged taps, load coils, cable gauge, etc.; follows cable counts from originating to terminating point; reviews possibility of rearrangements, etc.

D. Engineering Work Order Charge

33. The Engineering Work Order Charge recovers certain general costs associated with loop conditioning activities. These include the engineering costs associated with verifying facilities availability, writing the work order, and preparing the special bill generated as a result of construction.

34. The functions required for Engineering Work Order are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Engineering	Determines work necessary to qualify loop; prepares a written order for such work.
Engineering Clerk	Updates cable plats

E. Pair Swap Charge

35. A loop may be unqualified for ADSL transmission because it is served by Digital Loop Carrier technology, and thus includes fiber-optic rather than copper feeder

cable. Where appropriate, "swapping" the DLC loop with a spare all-copper loop from a different terminal[9] may nevertheless enable BA-NY to provide a qualified loop to the CLEC. Such a "pair swap" between two *copper* loops may also provide an efficient alternative to conditioning an unqualified copper loop.

36. A situation in which a loop served by DLC is swapped with a copper loop is known as a fiber-to-copper swap. A situation in which an unqualified copper loop is swapped with another, qualified copper loop is known as a copper-to-copper swap. BA-NY estimates that fiber-to-copper swaps will constitute approximately 15% of all swaps; copper-to-copper swaps constitute the remaining 85%.

37. If no spare loops are available for a pair swap, BA-NY may still be able to swap the unqualified loop in question with a qualified copper loop currently being used to serve another customer. In that case, the other customer would have to be switched to the unqualified loop. Such involvement of a second non-spare loop in a pair swap occurs in about 20% of copper-to-copper swaps and in about 5% of fiber-to-copper swaps.

38. The Pair Swap Charge recovers the costs associated with implementing such swaps. A single "blended" rate is set based on the percentages set forth above.

39. The functions required for Pair Swap are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Service Technician	Moves drop at Serving Area Interface, Remote Terminal, etc.
Frame Attendant	Moves jumper to the new pair on mainframe.
Central Office Technician	Tests and monitors cross-connect process, both testing for a spare pair and testing the customer's circuit both before and after the swap.
Test Center Clerk	Obtains list of spares from LFACs; updates LFACs

[9] No charge would be imposed if the loop could be assigned to a spare pair in the *same* terminal.

F. Removal of Load Coil Charge

40. A load coil is an inductor that is connected into a loop in order to improve its voice transmission characteristics. Such coils are generally utilized on longer copper loops, specifically those longer than 18,000 feet. At such lengths, an unloaded copper loop may distort a voice signal by cutting off higher frequencies within the audible range. The load coil "flattens" the frequency/response curve in the audible frequency range, ensuring that the higher frequencies are not excessively attenuated.

41. Despite its benefits for voice transmission, load coils can cause severe signal attenuation in the frequency ranges associated with high-speed data transmission. Accordingly, "loaded" loops are generally unsuitable for xDSL transmission.

42. If a loop is unqualified because of the presence of load coil, and if a swap is not feasible or appropriate, then conditioning will entail the removal of the coil. The Removal of Load Coil Charge recovers the costs associated with such removal.[10] It should be noted that this charge does *not* recover any costs associated with load coil reconnection if the loop is subsequently surrendered by the CLEC and is used by BA-NY as a POTS loop.

43. BA-NY will not impose the Load Coil Removal charge if load coils must be removed from loops less than 18,000 long, since load coils are not required for such loops under BA-NY's design criteria. Since the number of load coils on a loop depends upon its length, the charge is loop-length-sensitive. Longer loops have more load coils, and thus generate greater load coil removal costs.

---

[10] The load coil is generally not physically removed from its location, since loops other than the one in question may be connected to it. Rather, the splice case is opened, the loop is identified and disconnected from the coil, and the loop is re-spliced.

44. The functions required for Load Coil Removal are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Engineering	Prepares final completion reports, closes out order, updates plats.
Splicing Technician/Helper	Splicing technician (and helper for underground situations) actually removes the coil. Must travel to the location(s) of the coil(s); prepare the site; open up the splice; remove the pairs from the load coil to the splice; reconnect the cable pair in the splice; and then close up the splice.
General Clerk	Handles scheduling; updates ECRIS; posts workstep completion.

G. Removal of Bridged Tap Charge

45. The presence of bridged taps can also impair the xDSL transmission characteristics of a loop. The Removal of Bridged Taps Charge recovers the costs associated with bridged tap removal, where requested by the CLEC.

46. Separate charges are proposed for (a) removal of a single bridged tap, and (b) removal of multiple taps. When the removal of multiple bridged taps is required, the Company determined that half of the time two taps must be removed and half of the time three taps must be removed, for an average of two-and-a-half taps. The charge does not apply when loops of less than 18,000 feet have bridged taps above 6,000 feet removed.

47. The functions required for Bridged Tap Removal are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Engineering	Prepares final completion reports, closes out order, updates plats.
Splicing Technician/Helper	Splicing technician (and helper for underground situations) must travel to the location(s); prepare the site; and remove the bridged tap.
General Clerk	Handles scheduling; updates ECRIS; posts workstep completion.

H. ISDN Loop Extension Electronics Charge

48. The August 30 tariff filing also created a charge applicable when a CLEC orders a two-wire digital link (*i.e.*, a link used for provisioning ISDN-BRI service) and the loop length is greater than 18,000 feet. In such cases, additional electronics must be added to the link.

49. This charge recovers the cost of the electronics (ADTRAN Total Reach), plus the labor costs associated with its installation.

50. The functions performed for ISDN Extension Electronics are as follows:

PERSONNEL CATEGORY	FUNCTION PERFORMED
Engineering	Updates engineering records.
Central Office Technician	Tests lines before and after installation.
Central Office Labor	Installs repeater card in COT and implements cross-connection
Service Technician	Travels to Remote Terminal and installs card.

COSTS AND PROPOSED RATES FOR ANCILLARY SERVICES

A. General Costing Issues

51. Detailed costs studies for the ancillary services are provided in Exhibit A. We describe here some general features of the studies.

52. The rates proposed by BA-NY for the ancillary services are equal to their costs, as determined by the cost studies documented in Exhibit A.

53. The costs determined in BA-NY's cost studies are forward-looking, in the sense that they reflect the efficient provisioning practices to be used in the foreseeable future. The costs are forward-looking despite the fact that they assume the use of copper feeder cable, in contrast to the DLC-based, fiber-feeder technology the underlies BA-

NY's studies of other types of loops.[11] xDSL transmission technology, as noted above, is inherently copper based. Although retail data/voice services with DSL-like transmission characteristics can be implemented on DLC loops, what CLECs have requested from BA-NY, and what BA-NY is proposing to provide, are simple copper transmission paths to which the CLECs can attach their own xDSL electronics, provided by their own vendors and adapted to the retail services that they intend to offer. These electronics would not function properly on DLC loops. Thus, the use of copper reflects the most efficient technology currently available for provisioning the particular unbundled service that has been requested and that is being provided.[12] The proposed rates for ancillary services properly reflect the most efficient ways of carrying out certain functions that are *required* for copper-based loops to be used for xDSL transmission. In this respect, it is irrelevant that, for example, load coils would not be used on loops equipped with Digital Loop Carrier technology or on copper loops specifically deployed for xDSL applications. They *are* utilized, for good and sufficient reasons, on existing copper loops.

54. All but one of the ancillary charges at issue here are NRCs, and the one that is not (Mechanized Loop Qualification) is a recurring charge based on a non-recurring cost. Non-recurring costs are essentially determined as the product of an estimated worktime and a relevant labor rate.

55. Worktimes were determined as follows:

---

[11] In Phase 1 of Case 95-C-0657, BA-NY submitted cost studies for two-wire analog loops, four-wire analog loops, two-wire digital (ISDN-BRI capable) loops, and four-wire digital (ISDN-PRI capable) loops. The studies all assumed ubiquitous deployment of DLC technology.

[12] Moreover, the copper loop plant used for xDSL-qualified loops necessarily consists of *existing* copper plant, since new loop deployments are made by BA-NY using DLC technology. It thus cannot be argued that the ancillary charges should be based on an assumption that new copper loops are being specifically deployed (without load coils) for xDSL applications. Instead, what must be assumed as a starting point is copper loops with load coils in place where required for effective voice transmission.

The first step was to determine the types of work activities required to provide the function in question. Various provisioning-process subject matter experts ("SMEs") were consulted in order to make these determinations. The organizations contacted were: Installation & Maintenance Staff, Technology Deployment/Facility Management Staff, Facilities Analysis/Facility Management Staff, Product Development, and the Operations Assurance Administration Group.

Second, the specific work activities required and the functional organizations involved were identified. The work groups included in this study were: Central Office Technicians, Service Technicians, Frame Attendants, Engineering, and Cable Splicing Technicians and Helpers. Within each functional organization and for each work activity, the relevant JFC (Job Function Code) was identified in order to determine the relevant labor rate.

Third, an estimate of the average length of time required to perform these individual functions (testing, framework, splicing, etc.) was determined through discussions with the knowledgeable SMEs. In some instances, worktimes were determined separately for alternative provisioning scenarios; these worktimes were then combined into a weighted average based on the percentage of times in which each particular scenario would occur.

56. SMEs were instructed to estimate worktimes assuming efficient processes, and resolving any uncertainties in favor of shorter worktimes.

57. The labor rates used in these studies are based on BA-NY's directly assigned labor costs for specific JFCs, for New York, for mid-year 1999. In utilizing directly assigned labor rates, BA-NY is departing from the NRC methodology utilized in Case 95-C-0657, which was based on *fully* assigned labor rates. These studies are con-

sistent, however, with the methodology that BA-NY intends to utilize in its December 3 "third module" UNE cost filing.

58. Directly assigned labor rates include basic wage and salary costs for the relevant JFC and for clerical support and management supervisory personnel with direct reporting responsibilities (*i.e.*, those to whom the job functions in question directly report). It also includes cost-causative loadings assigned to those wages and salaries, such as payroll taxes and benefits. The fully assigned rates used in Case 95-C-0657 included, in addition to the directly assigned labor costs, wages, salaries, and loadings associated with additional administrative and support personnel assigned to higher-level management.

59. Worktimes and relevant labor rates are set forth in Exhibit A for each of the NRC studies.

B. Mechanized Loop Qualification

60. The Mechanized Loop Qualification costs are based on the costs of creating and maintaining the Database.

61. The Database creation costs are essentially the costs of the testing (prequalification) of a sample of all loops. Testing costs are determined by multiplying the cost per MLT test (20 seconds), by the 1.5 tests required, on average, per tested loop in order to obtain a clear and dispositive result, and then by the relevant labor rate. This generates a per-tested-loop cost. The total testing cost (loops tested times per-loop cost) is then determined for the five-year period that will be required to qualify all of BA-NY's loops, and is reduced to a net present value ("NPV") basis. This total cost is then divided by the forecasted number of wholesale and retail ADSL links that BA-NY will be pro-

viding or using[13], also computed over a five year period and reduced to an NPV basis. The result is an average testing cost per loop utilized for ADSL/HDSL transmission. This cost was amortized over a thirty-month period (representing an average "service life" for a customer's use of a retail ADSL-based service) to arrive at a monthly recurring cost.

62. Another component of the Mechanized Loop Testing Charge is the Data-base maintenance cost. The cost was developed by calculating the cost (labor rate times activity time duration), of program development and refinements, loading and extracting data, and other ongoing maintenance. Next, the cumulative number of lines qualified over the planning period, by year, were multiplied by the cost previously developed. Again, the forecasted number of subscribers requesting ADSL over the five-year plan-ning period were also brought back, on a NPV basis, to the current year to match these expenses. The total Database maintenance expense was then divided by the total fore-casted number of ADSL subscribers and converted to a monthly expense.

* * *

63. This concludes the Joint Affidavit.

[13] This forecast is based on BA-NY's own retail forecast, stimulated by 20 % to reflect the possibility that the presence of CLECs will expand the customer base for ADSL services in addition to taking customers away from BA-NY. The study is highly conservative in this respect.

SIGNATURES

CARMELO R. CURBELO

Sworn to before me this
13th day of September, 1999

Notary Public

MIGUEL A. ROSA
Notary Public, State of New York
No. 43-4771951, Qualified in Kings County
Certificate Filed in New York County
Commission Expires Nov. 30, 2022

AMY STERN

Sworn to before me this
13th day of September, 1999

Notary Public

JAMES F. SCHAFER

Sworn to before me this
13th day of September, 1999

Notary Public

MIGUEL A. ROSA
Notary Public, State of New York
No. 43-4771951, Qualified in Kings County
Certificate Filed in New York County
Commission Expires Nov. 30, 2022

l:\worddocs\jp03480\unecosts\testmny\adsl-aff.doc

SIGNATURES

CARMELO R. CURBELO

Sworn to before me this
13th day of September, 1999

Notary Public

AMY STERN

Sworn to before me this
13th day of September, 1999

Notary Public

ROBERT BUTTE, SR.
Notary Public, State of New York
No. 4845741
Qualified in Westchester County
Commission Expires 7/31/01

JAMES F. SCHAFER

Sworn to before me this
13th day of September, 1999

Notary Public

Exhibit A

LOOP CONDITIONING STUDY

BELL ATLANTIC - NEW YORK

TELRIC

1999

LOOP CONDITIONING STUDY
BELL ATLANTIC - NEW YORK

TELRIC

1999

INDEX

LOOP CONDITIONING STUDY
BELL ATLANTIC - NEW YORK

COST ELEMENT	NONRECURRING COST	SOURCE
MANUAL LOOP QUALIFICATION / INQUIRY	$40.37	Page 4, Ln 3
ENGINEERING QUERY	$113.95	Page 4, Ln 6
ENGINEERING WORK ORDER	$81.00	Page 4, Ln 9
DROP CABLE PAIR (Single pair)	$190.39	Page 4, Ln 12
DROP CABLE PAIR (Single / Double pair wgt)	$224.58	Page 4, Ln 15
ADD ELECTRONICS (REPEATER)	$999.76	Page 4, Ln 18
REMOVE BRIDGE TAP (ONE OCCURANCE)	$395.60	Page 4, Ln 21
REMOVE BRIDGE TAPS (0 to 18,000 feet)	$917.05	Page 4, Ln 24
REMOVE LOAD COILS (21,000 feet)	$1,090.87	Page 4, Ln 27
REMOVE LOAD COILS (27,000 feet)	$1,438.51	Page 4, Ln 30
DROP DLC CABLE PAIR (Single pair)	$190.39	Page 4, Ln 33
DROP DLC CABLE PAIR (Single / Double pair wgt)	$198.94	Page 4, Ln 36
DROP DLC / CABLE PAIR (Single / Double pair wgt)	$220.73	Page 4, Ln 39
MECHANIZED LOOP QUALIFICATION	MO REC $0.36	Page 11, Ln 34

LOOP CONDITIONING STUDY
NEW YORK

LINE	DESCRIPTION	NRC	SOURCE
1	MANUAL LOOP QUALIFICATION / INQUIRY	$36.47	Page 5, Ln 4
2	TELRIC	$40.30	Ln 1 x Ln 40
3	TOTAL with GRL	$40.37	Ln 2 x Ln 41
4	ENGINEERING QUERY	$102.95	Page 5, Ln 7
5	TELRIC	$113.75	Ln 4 x Ln 40
6	TOTAL with GRL	$113.95	Ln 5 x Ln 41
7	ENGINEERING WORK ORDER	$73.18	Page 5, Ln 10
8	TELRIC	$80.86	Ln 7 x Ln 40
9	TOTAL with GRL	$81.00	Ln 8 x Ln 41
10	DROP CABLE PAIR (Single pair)	$172.01	Page 6, Ln 5
11	TELRIC	$190.07	Ln 10 x Ln 40
12	TOTAL with GRL	$190.39	Ln 11 x Ln 41
13	DROP CABLE PAIR (Single / Double pair wgt)	$202.89	Page 6, Ln 13
14	TELRIC	$224.19	Ln 13 x Ln 40
15	TOTAL with GRL	$224.58	Ln 14 x Ln 41
16	ADD ELECTRONICS (REPEATER)	$903.23	Page 6, Ln 19
17	TELRIC	$998.06	Ln 16 x Ln 40
18	TOTAL with GRL	$999.76	Ln 17 x Ln 41
19	REMOVE BRIDGE TAP (ONE OCCURANCE)	$357.40	Page 7, Ln 12
20	TELRIC	$394.93	Ln 19 x Ln 40
21	TOTAL with GRL	$395.60	Ln 20 x Ln 41
22	REMOVE BRIDGE TAPS (0 to 18,000 feet)	$828.50	Page 7, Ln 30
23	TELRIC	$915.50	Ln 22 x Ln 40
24	TOTAL with GRL	$917.05	Ln 23 x Ln 41
25	REMOVE LOAD COILS (21,000 feet)	$985.54	Page 8, Ln 12
26	TELRIC	$1,089.02	Ln 25 x Ln 40
27	TOTAL with GRL	$1,090.87	Ln 26 x Ln 41
28	REMOVE LOAD COILS (27,000 feet)	$1,299.61	Page 8, Ln 24
29	TELRIC	$1,436.07	Ln 28 x Ln 40
30	TOTAL with GRL	$1,438.51	Ln 29 x Ln 41
31	DROP DLC CABLE PAIR (Single pair)	$172.01	Page 9, Ln 5
32	TELRIC	$190.07	Ln 31 x Ln 40
33	TOTAL with GRL	$190.39	Ln 32 x Ln 41
34	DROP DLC CABLE PAIR (Single / Double pair wgt)	$179.73	Page 9, Ln 13
35	TELRIC	$198.60	Ln 34 x Ln 40
36	TOTAL with GRL	$198.94	Ln 35 x Ln 41
37	DROP DLC / CABLE PAIR (Single / Double pair wgt)	$199.42	Page 9, Ln 16
38	TELRIC	$220.36	Ln 37 x Ln 40
39	TOTAL with GRL	$220.73	Ln 38 x Ln 41

40	TELRIC LOADING	1.1050
41	GRL LOADING	1.0017

LOOP CONDITIONING STUDY
BELL ATLANTIC - NEW YORK

MANUAL LOOP QUALIFICATION / INQUIRY

LINE	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	SOURCE
1	Central Office Technician (MA) (RCCC)	$51.21	0.25	100.00%	0.25	$12.80	
2	Engineering (FMC)	$51.51	0.08	60.00%	0.05	$2.58	
3	Engineering Clerk	$35.15	1.00	60.00%	0.60	$21.09	
4						**$36.47**	Sum Lns 1-3

ENGINEERING QUERY

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
5	Central Office Technician (MA) (RCCC)	$51.21	0.25	100.00%	0.25	$12.80	
6	Engineering (FMC)	$51.51	1.75	100.00%	1.75	$90.14	
7						**$102.95**	Sum Lns 5-6

ENGINEERING WORK ORDER

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
8	Engineering (FMC)	$51.51	1.25	100.00%	1.25	$64.39	
9	Engineering Clerk	$35.15	0.25	100.00%	0.25	$8.79	
10						**$73.18**	Sum Lns 8-9

TOV – Remove an overaged Left in Dial Tone Line. (Date sensitive.) This work is transparent to the end user or CLEC. Charges are not assessed.

Special Construction/other – Special construction or other "options" may be available in several situations. BA Retail – 2W Digital ISDN – if a BA Retail end user requests ISDN, and it is currently not provisioned out of the central office which normally serves the end user, a "re-home" may be possible. This option allows the ISDN service to be provisioned out of an alternate Central Office that is ISDN equipped until the option is made available in the end users normal central office. This option is not necessary in the CLEC environment since a 2W Digital ISDN unbundled loop can be ordered out of any Central Office, regardless of the availability of the BA Retail ISDN service. If a BA Retail end user requests ISDN and it is possible to provision the service if construction work were performed to add "electronics" to the loop, then this work is offered to the end user. This special construction option is also offered to the CLEC/DLEC; installation intervals are impacted and charges are incurred.

CLEC Requirements:

On the majority of the work activities identified above, CLEC/DLEC action is not required. CLEC/DLEC action is required on pair swaps and on requests to add electronics to a 2W Digital ISDN loop (i.e., Digital Designed Loop request).

Pair Swap:*

Step 1: The CLEC electronically submits an order for 2W ADSL (for example).

Step 2: The TISOC receives the CLEC request; processes necessary paperwork for a loop qualification to be performed. This documentation is sent to the appropriate BA work group.

Step 3: A MLT test is performed. In addition, BA NY checks for available facilities.

If facilities are found, and the loop qualifies, the TISOC sends a FOC (Firm Order Confirmation) to the CLEC/DLEC. The loop is provisioned within the standard interval.

If facilities are not found, the loop qualification request is forwarded to BA Engineering. BA Engineering will attempt to find facilities including the possibility of a swap.

If all attempts at freeing up a copper facility fail, BA Engineering will advise the TISOC. The TISOC will query the CLEC/DLEC and request a cancellation of the order. The CLEC/DLEC cancels order.

If a swap is possible, BA Engineering will inform the TISOC.

Step 4: The TISOC will query the CLEC/DLEC that a Pair Swap or Line Station Transfer is possible and requests further direction from the CLEC/DLEC.

Step 5: The CLEC may cancel the request.

The CLEC, via a sup to the original order, request that BA proceed with the work required in order to free up a copper facility.

The TISOC will inform BA Engineers to proceed with the requested work. A FOC will be returned to the CLEC/DLEC with an extended date due. The order will be provisioned.

Step 6: A separate bill will be produced for the work performed.

- Process flow diagram available.

2W Digital ISDN Electronics:

Step 1: The CLEC electronically submits an order for 2W Digital ISDN loop with ISDN electronics. (A unique NC/NCI code is used on the electronic order when this is requested.)

Step 2: The TISOC receives the CLEC request; sends request to BA Engineering.

Step 3: If the copper portion of the facility is confirmed to be over 18k ft, the request for ISDN electronics will be processed.

Step 4: The CLEC/DLEC request is forwarded to BA Engineering. BA Engineering will process an engineering work order and will forward to BA construction.

Step 5: Construction work will be performed. This process may take up to 18 days (including the work performed by BA Engineering and all construction work); a FOC will be returned to the CLEC/DLEC after the construction work has been done. The order will be provisioned.

Step 6: A separate bill will be produced for the work performed.

LOOP CONDITIONING STUDY

BELL ATLANTIC - NEW YORK

DROP CABLE PAIR (Single pair)

LINE	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	SOURCE
1	Central Office Technician (MA)	$51.21	0.50	100.00%	0.50	$25.61	
2	Service Technician	$43.13	2.50	100.00%	2.50	$107.83	
3	Frame Attendant	$42.00	0.50	100.00%	0.50	$21.00	
4	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
5						**$172.01**	Sum Lns 1-4

DROP CABLE PAIR (Single / Double pair wgt)

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
6	Central Office Technician (MA)	$51.21	0.50	100.00%	0.50	$25.61	
7	Central Office Technician (MA)	$51.21	0.50	20.00%	0.10	$5.12	
8	Service Technician	$43.13	2.50	100.00%	2.50	$107.83	
9	Service Technician	$43.13	2.50	20.00%	0.50	$21.57	
10	Frame Attendant	$42.00	0.50	100.00%	0.50	$21.00	
11	Frame Attendant	$42.00	0.50	20.00%	0.10	$4.20	
12	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
13						**$202.89**	Sum Lns 6-12

ADD ELECTRONICS (REPEATER)

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
14	Material (ADTRAN Total Reach)	NA	NA	NA	NA	$740.00	
15	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
16	Central Office Technician (MA)	$51.21	0.50	100.00%	0.50	$25.61	
17	CO Labor (COT)	$51.21	0.50	100.00%	0.50	$25.61	
18	Service Technician (RT)	$43.13	2.00	100.00%	2.00	$86.26	
19						**$903.23**	Sum Lns 14-18

LOOP CONDITIONING STUDY
BELL ATLANTIC - NEW YORK

REMOVE BRIDGE TAP
1 OCCURRENCE

LINE	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	SOURCE
	Aerial						
1	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
2	Splicing Technician	$46.46	4.00	100.00%	4.00	$185.84	
3	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
4						$229.17	Sum Lns 1-3
	Underground						
5	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
6	Splicing Technician	$46.46	4.00	100.00%	4.00	$185.84	
7	Splicing Technician Helper	$46.46	4.00	100.00%	4.00	$185.84	
8	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
9						$415.01	Sum Lns 5-8

		Cost A	% of Occurance B	Wgt Cost C=A*B	
10	**Aerial**	$229.17	31.00%	$71.04	
11	**Undgrd**	$415.01	69.00%	$286.36	
12				**$357.40**	Sum Lns 10-11

REMOVE BRIDGE TAPS
0 to 18,000 feet

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
	Aerial						
13	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
14	Splicing Technician	$46.46	4.00	0.00%	0.00	$0.00	
15	Splicing Technician	$46.46	8.00	50.00%	4.00	$185.84	
16	Splicing Technician	$46.46	12.00	50.00%	6.00	$278.76	
17	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
18						$507.93	Sum Lns 13-17
	Underground						
19	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
20	Splicing Technician	$46.46	4.00	0.00%	0.00	$0.00	
21	Splicing Technician Helper	$46.46	4.00	0.00%	0.00	$0.00	
22	Splicing Technician	$46.46	8.00	50.00%	4.00	$185.84	
23	Splicing Technician Helper	$46.46	8.00	50.00%	4.00	$185.84	
24	Splicing Technician	$46.46	12.00	50.00%	6.00	$278.76	
25	Splicing Technician Helper	$46.46	12.00	50.00%	6.00	$278.76	
26	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
27						$972.53	Sum Lns 19-26

		Cost A	% of Occurance B	Wgt Cost C=A*B	
28	**Aerial**	$507.93	31.00%	$157.46	
29	**Undgrd**	$972.53	69.00%	$671.05	
30				**$828.50**	Sum Lns 28-29

LOOP CONDITIONING STUDY
BELL ATLANTIC - NEW YORK

REMOVE LOAD COILS
21,000 FEET

LINE	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	SOURCE
	Aerial						
1	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
3	Splicing Technician	$46.46	16.00	100.00%	12.00	$557.52	
3	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
4						$600.85	Sum Lns 1-3
	Underground						
5	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
6	Splicing Technician	$46.46	16.00	100.00%	12.00	$557.52	
7	Splicing Technician Helper	$46.46	16.00	100.00%	12.00	$557.52	
8	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
9						$1,158.37	Sum Lns 5-8

		Cost A	% of Occurance B	Wgt Cost C=A*B	
10	**Aerial**	$600.85	31.00%	$186.26	
11	**Undgrd**	$1,158.37	69.00%	$799.28	
12				**$985.54**	Sum Lns 10-11

REMOVE LOAD COILS
27,000 feet

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
	Aerial						
13	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
14	Splicing Technician	$46.46	20.00	100.00%	16.00	$743.36	
15	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
16						$786.69	Sum Lns 13-15
	Underground						
17	Engineering	$51.51	0.50	100.00%	0.50	$25.76	
18	Splicing Technician	$46.46	20.00	100.00%	16.00	$743.36	
19	Splicing Technician Helper	$46.46	20.00	100.00%	16.00	$743.36	
20	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
21						$1,530.05	Sum Lns 17-20

		Cost A	% of Occurance B	Wgt Cost C=A*B	
22	**Aerial**	$786.69	31.00%	$243.87	
23	**Undgrd**	$1,530.05	69.00%	$1,055.73	
24				**$1,299.61**	Sum Lns 22-23

DROP DLC CABLE PAIR / PAIRS

DROP DLC CABLE PAIR (Single pair)

LINE	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	SOURCE
1	Central Office Technician (MA)	$51.21	0.50	100.00%	0.50	$25.61	
2	Service Technician	$43.13	2.50	100.00%	2.50	$107.83	
3	Frame Attendant	$42.00	0.50	100.00%	0.50	$21.00	
4	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
5						**$172.01**	Sum Lns 1-4

DROP DLC CABLE PAIR (Single / Double pair wgt)

	Function	Hourly Rate A	Hours B	% of Occurrence C	Wgt Hours D=B*C	Wgt Total Cost E=A*D	
6	Central Office Technician (MA)	$51.21	0.50	100.00%	0.50	$25.61	
7	Central Office Technician (MA)	$51.21	0.50	5.00%	0.03	$1.28	
8	Service Technician	$43.13	2.50	100.00%	2.50	$107.83	
9	Service Technician	$43.13	2.50	5.00%	0.13	$5.39	
10	Frame Attendant	$42.00	0.50	100.00%	0.50	$21.00	
11	Frame Attendant	$42.00	0.50	5.00%	0.03	$1.05	
12	General Clerk	$35.15	0.50	100.00%	0.50	$17.58	
13						**$179.73**	Sum Lns 6-12

		% of Occurrence C	Total Cost D	Wgt Total Cost E=C*D	
14	**DROP CABLE PAIR (Single / Double pair wgt)**	85%	$202.89	$172.46	Page 6, Ln 13
15	**DROP DLC CABLE PAIR (Single / Double pair wgt)**	15%	$179.73	$26.96	Page 9, Ln 13
16	**TOTAL WGT**	100%		**$199.42**	Sum Lns 14-15

LOOP CONDITIONING STUDY
BELL ATLANTIC - NEW YORK

		Labor Rate
Central Office Technician	1999	$51.21
Service Technician	1999	$43.13
Frame Attendant	1999	$42.00
General Clerk	1999	$35.15
Engineer	1999	$51.51
Splicing Technician	1999	$46.46
Splicing Helper	1999	$46.46

	% of Occurrence
Aerial	31.00%
Underground	69.00%
	100.00%

TELRIC LOADING	1.1050
GRL LOADING	1.0017

All Jurisdictions **Common OH Expense Loading : 10.50%**

Application: **Total Unit Cost X {1+COH} = UNE Rate w/o GRL**

NY	Gross Revenue	Gross Receipts *	Regulatory Fees	Uncollectibles	Total GRL
		0.0000	0.0017	0.00001	**0.0017**

****Note: Not Applicable in TELRIC***

Application: **UNE Rate X {1 + (GRL/(1-GRL)) } = UNE Rate w/GRL**

Loop Qualification Database

Initial Qualification

		Time	Labor Rate	Source	Cost
L1	Test Readiness / Execution	0.0083	51.51		$0.43
L2	Test Analysis	0.0083	51.51		$0.43
L3	Total				$0.86
L4	Lines Qual. - Incremental - Yr 1				3,458,792
L5	Lines Qual. - Incremental - Yr 2				4,099,057
L6	Lines Qual. - Incremental - Yr 3				1,394,356
L7	Lines Qual. - Incremental - Yr 4				546,520
L8	Lines Qual. - Incremental - Yr 5				414,793
L9	Expense - Yr 1			Ln 3 * Ln 4	$2,969,372.93
L10	Expense - Yr 2			Ln 3 * Ln 5	$3,519,040.43
L11	Expense - Yr 3			Ln 3 * Ln 6	$1,197,054.63
L12	Expense - Yr 4			Ln 3 * Ln 7	$469,187.42
L13	Expense - Yr 5			Ln 3 * Ln 8	$356,099.79
L14	NPV of Expense			(npv of Ln 9 - Ln 13)	$6,897,061.40
L15	Total number of lines (NPV)			PLM forecast	2,338,000
L16	Qualification cost per line			Ln14 / Ln15	$2.95
L17	Amoritized qualification cost per line (30 months)				$0.11

Ongoing Maintenance

		Time	Labor Rate	Source	Cost
L18	Database updates w/LQ codes	0.0041667	51.51		$0.21
L19	Lines Qual. - Cumulative - Yr 1			Ln 4	3,458,792
L20	Lines Qual. - Cumulative - Yr 2			Ln 4 + Ln 19	7,557,849
L21	Lines Qual. - Cumulative - Yr 3			Ln 5 + Ln 20	8,952,205
L22	Lines Qual. - Cumulative - Yr 4			Ln 6 + Ln 21	9,498,725
L23	Lines Qual. - Cumulative - Yr 5			Ln 7 + Ln 22	9,913,518
L24	Expense - Yr 1			Ln 18 * Ln 19	$742,343.23
L25	Expense - Yr 2			Ln 18 * Ln 20	$1,622,103.34
L26	Expense - Yr 3			Ln 18 * Ln 21	$1,921,367.00
L27	Expense - Yr 4			Ln 18 * Ln 22	$2,038,663.85
L28	Expense - Yr 5			Ln 18 * Ln 23	$2,127,688.80
L29	NPV of Expense			(npv of Ln 24 - Ln 28)	$5,952,793.34
L30	Total number of circuits (NPV)			PLM forecast	2,338,000
L31	Monthly Expense			Ln 29 / Ln 30 / 12	$0.21
L32	Total Loop Qualification Expense			Ln 17 + Ln 31	$0.33
L33	TELRIC			Ln 32 * Ln 35	$0.36
L34	TOTAL with GRL			Ln 33 * Ln 36	$0.36
L35	**TELRIC LOADING**		**1.1050**		
L36	**GRL LOADING**		**1.0017**		

EXHIBIT "EHG-RW-4"

DSL Collaborative Initial Agenda

Subject: CLEC Collaborative Issues
Date: Fri, 30 Jul 99 14:39:00 EST
From: "'Tim Zakriski'" <TGZ@dps.state.ny.us>
To: "'gary cohen'" <gary@technologylaw.com>,"'christy kunin'" <christy@technologylaw.com>,"'Dan Martin'" <DMM@dps.state.ny.us>,"'Michael J. Rowley'" <MJR@dps.state.ny.us>,"'kim scovill'" <kscovill@choiceonecom.com>,"'antony petrilla'" <arpetrilla@swidlaw.com>,"'lori dolqueist'" <ladolqueist@swidlaw.com>,"'susan spear'" <susan.spear@mci.com>,"'susan davis'" <sjdavis@covad.com>,"'karen itzkowitz'" <itzkowitz@att.com>,"'mark defalco'" <mdef@epix.net>,"'robert mccausland'" <robert.mccausland@allegiancetelecom.com>,"'Eric H. Geis'" <ehgeis@rythms.net>,"'Ross Buntrock'" <rbuntrock@kelleydrye.com>

7/30/99

TO: All CLEC DSL Collaborative Participants

FROM: Tim Zakriski, NYDPS Staff

SUBJ: DSL Collaborative Issues

As mentioned in my e-mail, here is a list of issues which I believe should be discussed in the context of the collaborative. Some of these issues are ripe for discussion and resolution now; others may require further investigation and analysis before an informed decision can be made. We will discuss the list and attempt to establish priorities on Monday.

DSL Collaborative Issues

1. DSL Loop Qualification - CLECs need to know certain loop criteria in order to determine themselves if a specific loop is DSL capable. A list of the required criteria needs to be established jointly by the CLECs . Once established, BA will explain if it can provide the info and if not why not along with a discussion of its loop databases (existing and under development).

2. DSL Loop Prices - At this juncture BA has proposed that tariffed rates for Digital Conditioned Links (2 and 4-wire) be used for DSL links as an interim measure until DSL links are addressed and new rates set in the Second Network Elements Proceeding (98-C-1357). CLECs are concerned over what they claim are excessive non-recurring charges for removing impediments required to make links DSL capable. It appears to CLECs that they are being hit twice since they are paying for premium digital loops while at the same be charged the cost of removing impediments which exist in BA's embedded copper network. We need to determine what the CLECs are getting when they buy premium loops. No BA tariffed rates exist for DSL specific loops at this time although some parties claim that ISDN loops (such as those costed out in the first UNE proceeding) are fully DSL capable. During the collaborative we need to determine which recurring and non-recurring rates apply and hopefully agree on the level those rates should be set at (on an interim basis pending Second Network Elements Proceeding).

3. Line Sharing - The parties raised this issue at the recent technical conference. In its Advanced Services Order, the FCC tentatively concluded that states are not precluded from mandating line sharing -- and sought comment on this conclusion. The line sharing issue, specifically access to the "high frequency portion of the loop" needs to be explored and this can be done in the collaborative. Although a host of operational issues may surface, it would be in the best interests of all parties to discuss the particulars now. Line sharing could be considered an element in the Second Network Elements Proceeding.

4. Installation/Testing/Repair Problems - We heard a litany of problems which CLECs have encountered during the provisioning of DSL loops. It is unclear, and perhaps irrelevant as to who has been responsible, up to this point. More importantly, however, is how these provisioning issues can be resolved on a going forward basis. We will need to discuss how each of the parties interface (and at what level) with each other. Parties should be prepared to offer suggestions on how these problems can be corrected.

5. Digital Subscriber Line Access Multiplexers (DSLAMs) - Certain parties are interested in BA making DSLAM equipment accessible to CLECs on a per line cost basis. Further, CLECs are interested in "collocating" DSLAMS at BA remote terminal locations (cabinets, vaults, etc.). CLECs presently have the ability to provide this equipment in their collocation space in the LEC's end office. However, in the Second Network Elements Proceeding, x-DSL specific

ports could be offered as elements. We will discuss what the needs of the CLECs are and BA's position on what it can, and what it is obligated to provide.